STROMBERG CARBURETORS

Instructions for TYPE "D" *"Down Draft"*

Our Guarantee

Stromberg carburetors are sold under a guarantee as to material and workmanship, and any carburetor or parts thereof proving defective within a period of ninety days will be repaired or replaced free of charge upon their return to our factory, all transportation charges prepaid.

Important

Give us the name of the parts wanted, the Type and Serial Number of the carburetor, and the Make and Model of car for which parts are being ordered. This number appears on the top of the Float Chamber Cover.

If you will follow the directions your order will be properly filled from your first letter, and you will save yourself much delay and inconvenience.

We have, located in all the principal cities of the country, sales branches, distributors and service stations, each equipped to install and repair Stromberg Carburetors, and to render prompt and courteous service to any Stromberg user regardless of where carburetor may have been purchased. At each of these service stations you will find expert mechanics thoroughly versed in the regulation and requirements of all our different models. This service is at the command of all users of Stromberg Carburetors.

Sectional Views of the "D" Type Carburetor

Fig. 1

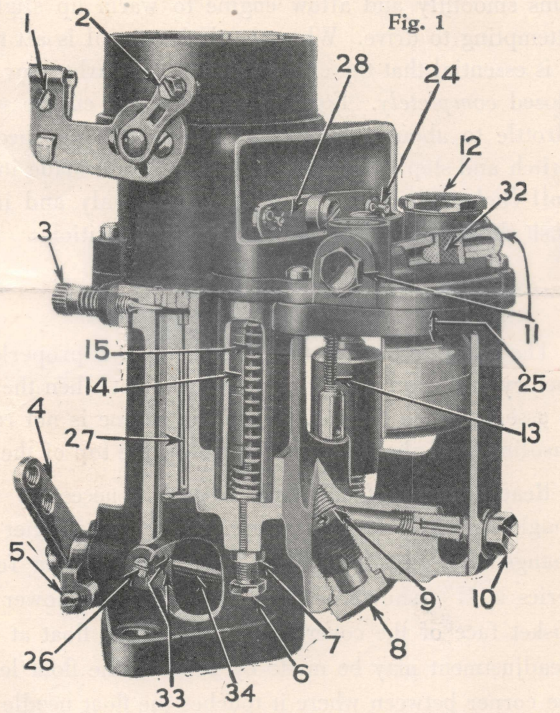
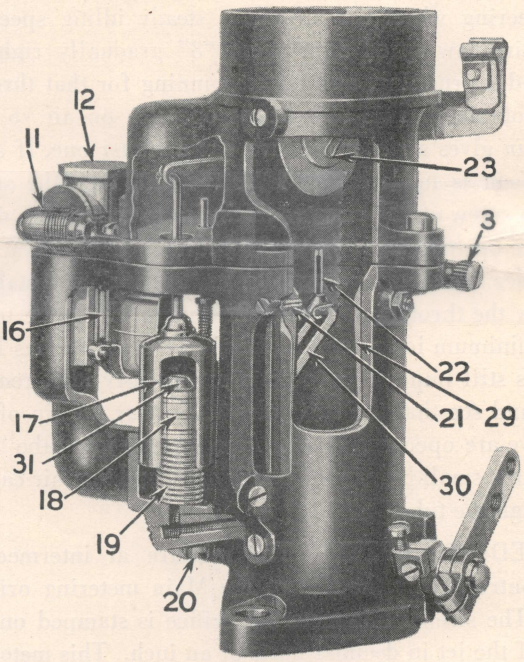


Fig. 2



Parts indicated in illustrations above are as follows:

1. Choke Control Tube Holder
2. Choke Lever Wire Clamp Screw
3. Idling Needle Valve
4. Throttle Lever
5. Throttle Stop Set Screw
6. Pump Adjustment Screw
7. Pump Adjustment Screw Lock Nut
8. Main Discharge Plug
9. Main Discharge Jet Retainer Plug
*10. Main Metering Jet
11. Gasoline Connection
12. Strainer Plug
13. Economizer Needle Valve
14. Vacuum Piston
15. Vacuum Piston Spring
16. Float Needle Valve and Seat
17. Pump Piston Sleeve
18. Pump Piston
19. Pump Piston Spring
*20. By-Pass Metering Jet (Economizer)
21. Pump Discharge Nozzle
22. High Speed Air Bleeder
23. Choke Valve (Flapper Type)
24. Pump Piston Link
25. Float Setting (see instructions)
26. Idle Discharge Plug
27. Idle Tube
28. Pump Lever
*29. Venturi Tube
*30. Main Discharge Jet
31. Pump Stud
32. Gasoline Strainer
33. Idling Discharge Holes
34. Throttle Valve

*IMPORTANT—When ordering venturi tubes, high speed bleeders, metering jets, main discharge jet, or by-pass jets, etc., specify the size required, and always state type of carburetor and serial number as well as model and make of car for which part is intended.

The "D" series of carburetors are of the down draft type, employing the following features:

A new semi-automatic choking device for starting.

A new positive acting accelerating device, consisting of a syringe pump which delivers an accelerating charge immediately the throttle is moved, and meters and delivers this charge over a definite period of time.

An adjustment to vary the quantity of accelerating charge according to climatic conditions.

Idle and low speed jets below the throttle, with separate idle adjustments for smooth, low speed performance.

An economizer which permits the carburetor to operate on a very lean and economical mixture at the closed throttle positions of average driving, and automatically shifts to the needed richer setting when the full power of the engine is called for.

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(OVER)

Adjustments

If engine, after running satisfactorily, then ceases to perform properly, look over carburetor connections, etc., BUT DO NOT CHANGE THE ADJUSTMENTS until other causes of trouble have been investigated. Carburetor adjustments should only be necessitated by changes in fuel or seasonal changes in weather. There are many other things on the engine subject to derangement besides the carburetor. Ninety per cent of the so-called carburetor trouble is due to fouled spark plugs, improper spacing of spark plug or ignition breaker points, intake manifold leaks, or lack of compression in the cylinders due to valves not seating tightly.

LOW SPEED ADJUSTMENT: The carburetor should carry the correct adjustment when delivered from the factory or car dealer. If the adjustment has been tampered with it may be restored as follows: Have engine well warmed up, so that the intake pipe below the carburetor is at least warm to the hand. Then slow engine down by gradual motion of the throttle lever on steering wheel till minimum steady idling speed is reached. Turn low speed adjustment "3" gradually right or left till steadiest running, and fastest running for that throttle position is obtained. This adjustment operates on air so that screwing it *in* gives a *richer* mixture, *out* a *leaner* one. If after this adjustment is made engine idles too fast, turn the small throttle stop screw at "5" counter-clockwise to reduce the minimum throttle opening until the desired idling speed is reached. If engine idles too slow, as shown by its "rolling" and stalling easily, screw the throttle stop screw inward or clockwise to increase the minimum idling speed. If after everything has been checked it is still impossible to get a satisfactory idle, remove plug "26" and see that the two holes "33" near the lip of the throttle valve are open and clean. Also remove idle tube "27" and see that the small hole in the end is open and that air can be blown through the tube.

INTERMEDIATE SPEED: The mixture at intermediate speeds is controlled by the size of the Main metering orifice, No. "10." The size of this metering orifice is stamped on the outer face of the jet in decimal parts of an inch. This metering orifice has been calibrated at the factory to supply the proper amounts of fuel, and should not be changed without special instructions.

WIDE OPEN SPEED: With wide open throttle an additional quantity of fuel is supplied by the By-Pass metering jet, No. "20."

ACCELERATING PUMP ADJUSTMENT: Pump adjustment Screw, No. "6," controls the quantity of fuel delivered by the accelerating pump. This screw is properly set at the factory for normal operating conditions. *In hot weather the accelerating pump discharge may be reduced by turning this screw up, or to the right; and in winter the quantity may be increased by turning to the left, or down.* Lock nut, No. "7," should be retightened so that adjustment will not change.

Starting and Warming Up

For starting in cold weather, open hand throttle about *one-third*, throw on the switch, pull choker out all the way and step on the starter button. *Hold* the choker *out* (control on dash) all the way until the engine starts, then open choker (push in control) slowly and close the throttle slightly until the engine is running at a fairly fast speed. Adjust choker until engine runs smoothly and allow engine to warm up slightly before attempting to drive. When the dash control is all the way out it is essential that the choke valve in the carburetor entrance is closed *completely*. For starting with the engine warm, *open* throttle to about a *30 miles an hour* driving speed, turn on switch and step on starter. If a start is not made immediately, pull choker control out for an *instant* only and immediately push choker control in again to normal position.

Float Level Adjustment

The gasoline level in the float chamber is properly set at the factory and should require no adjustment when the carburetor is assembled on the car. When the engine is not running, the gasoline level should stand 7/8" below the top of the float bowl.

Readjustment of the float setting is necessary only when rough handling of the carburetor or some other cause has changed the gasoline level. The correct setting for the "D" series is $\frac{23}{64}$" (shown as No. "25") from the lower surface or gasket face of the cover to the top of the float at the center. Readjustment may be made by bending the float lever arm in the corner between where it touches the float needle and where it meets the float body. If float is low, bend arm so as to move float upward toward float chamber cover the same distance as the level needs correction; that is, to raise the level $\frac{1}{16}$", bend the float up $\frac{1}{16}$". To lower the level hold the float arm tight where it touches the needle and bend the float downward away from the float chamber cover.

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